

~~101~~ 1 of 4 185571
SEARCH REQUEST FORM Scientific and Technical Information Center - EIC2800

Rev. 1/26/2006 This is an experimental format -- Please give suggestions or comments to Jeff Harrison, JEF-4B68, 22511.

Date 4/17/06 Serial # 10/848,784 Priority Application Date 4/30/01

Your Name M. Lewis Examiner # _____

AU 2822 Phone 571-292-1838 Room 5A30

In what format would you like your results? Paper is the default. PAPER DISK EMAIL

If submitting more than one search request form, please prioritize the searches in order of need.

Where have you searched so far on this case?

Circle: USPT DWPI EPO Abs JPO Abs IBM TDB

Other: _____

What relevant art have you found so far? Please attach citations or Information Disclosure Statements.

What types of references would you like? Please checkmark:

Primary Refs ☒ Nonpatent Literature ☐ Teaching Refs ☐
Secondary Refs ☒ Foreign Patents ☐ Other ☐

Is this a "Fast & Focused Search" request? (Circle One) YES NO

A "Fast & Focused Search" is completed in 2-3 hours (maximum). The search must be on a very specific topic and meet certain criteria. The criteria are posted in EIC2800 and on the STIC NPL Web Page at <http://uspto-a-patfr-2/siraapps/stic/npl/nplsearch.htm>

What is the topic, such as the novelty, motivation, utility, or other specific facets defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, registry numbers, definitions, structures, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract and pertinent claims.

Claims 41-49
Emitter

Problem: see page 1 lines 14-31
Solution: 11 11 2 11 3-9

Flat emitter that has high
current density and is able to ->

Staff Use Only

Searcher: Paul Kim

Searcher Phone: 254944

Searcher Location: STIC-EIC2800, JEF-4B68

Date Searcher Picked Up: 4/20/06

Date Completed: 4/21/06

Searcher Prep/Rev Time: 6 hrs

Online Time: 8 hrs

Type of Search

Structure (#) _____

Bibliographic _____

Litigation ☒

Fulltext ☒

Patent Family ☒

Other _____

Vendors

STN ☒

Dialog ☒

Questel/Orbit _____

Lexis-Nexis _____

WWW/Internet _____

Other _____

21apr06 10:04:31 User291227 Session D35.7

File 342:Derwent Patents Citation Indx 1978-05/200621

8 CT=US 6096570
0 CT=JP 2000011859
S1 8 CT=(US 6096570 OR JP 2000011859)

File 347:JAPIO Dec 1976-2005/Dec(Updated 060404)

(c) 2006 JPO & JAPIO

File 350:Derwent WPIX 1963-2006/UD,UM &UP=200625

(c) 2006 Thomson Derwent

6 PN=US 6648710 + PN=US 6741016 + PN=US 6753544 + PN=US
6758711 + PN=US 6882100 + PN=US 6902458 + PN=US 6911768 +
PN=WO 2002103738 + PN=WO 2002103740 + PN=WO 200289168
13 S1:S4
S1 13 Serial: SD128

Reconnected in file OS 21apr06 10:12:32

File 342:Derwent Patents Citation Indx 1978-05/200621

```
      1 CT=EP 532019
     11 CT=US 5760417
      0 CT=JP 5074329
      0 CT=JP 5074332
      1 CT=EP 532019
      0 CT=DE 69223707
S2    12 CT=(EP 532019 OR US 5760417 OR JP 5074329 OR JP 5074332
      OR EP 532019 OR DE 69223707)
```

File 347:JAPIO Dec 1976-2005/Dec(Updated 060404)

(c) 2006 JPO & JAPIO

File 350:Derwent WPIX 1963-2006/UD,UM &UP=200625

(c) 2006 Thomson Derwent

```
      10 PN=US 6835947 + PN=US 6841794 + PN=US 6852554 + PN=US
      6882100 + PN=US 6902458 + PN=US 6911768 + PN=US 6933517 +
      PN=WO 200289168 + PN=WO 200365425 + PN=WO 200373480 +
      PN=WO 200390243 + PN=WO 9806135
      16 S1:S5
S1    16 Serial: SD129
```

21apr06 10:29:42 User291227 Session D35.15

File 342:Derwent Patents Citation Indx 1978-05/200621

```

        6  CT=EP 1003195
        0  CT=CN 1254173
        6  CT=EP 1003195
        0  CT=JP 3112456
        6  CT=JP 2001155622
        0  CT=KR 2000035507
        0  CT=SG 86360
        1  CT=TW 436837
       11  CT=US 6285118
S2       20  CT=(EP 1003195 OR CN 1254173 OR EP 1003195 OR JP 3112456
           OR JP 2001155622 OR KR 2000035507 OR SG 86360 OR TW
           436837 OR US 6285118)

```

File 347:JAPIO Dec 1976-2005/Dec(Updated 060404)

(c) 2006 JPO & JAPIO

File 350:Derwent WPIX 1963-2006/UD,UM &UP=200625

(c) 2006 Thomson Derwent

```

       10  PN=US 6784621 + PN=US 6791248 + PN=US 6794805 + PN=US
           6815315 + PN=US 6815875 + PN=US 6844664 + PN=US 6852554 +
           PN=US 6902458 + PN=US 6939728 + PN=US 6940087 + PN=WO
           200013197 + PN=WO 200289166 + PN=WO 200289168 + PN=WO
           200373480
        1  PN=WO 200377320
        1  PN=WO 200396401
        2  PN=WO 200377320 + PN=WO 200396401

```

```

S1       59  S1:S12
S2       8   S1 AND EMITTER? ?

```

21apr06 10:34:23 User291227 Session D35.18

File 342:Derwent Patents Citation Indx 1978-05/200621

	8	CT=EP 1094485
	1	CT=JP 2001210224
	0	CT=CN 1293441
	8	CT=EP 1094485
	1	CT=JP 2001283717
	0	CT=SG 90185
	0	CT=TW 473758
S1	8	CT=(EP 1094485 OR JP 2001210224 OR CN 1293441 OR EP 1094485 OR JP 2001283717 OR SG 90185 OR TW 473758)

File 347:JAPIO Dec 1976-2005/Dec(Updated 060404)

(c) 2006 JPO & JAPIO

File 350:Derwent WPIX 1963-2006/UD,UM &UP=200625

(c) 2006 Thomson Derwent

	6	PN=US 6558968 + PN=US 6707061 + PN=US 6753544 + PN=US 6844664 + PN=US 6902458 + PN=WO 200235572 + PN=WO 200289166 + PN=WO 200289168 + PN=WO 200315117 + PN=WO 200461891
	24	S1:S5
S1	24	S1:S5
S2	10	S1 AND EMITTER? ?

21apr06 10:42:21 User291227 Session D35.21

File 342:Derwent Patents Citation Indx 1978-05/200621

```

      10 CT=US 6204597
      0 CT=WO 200046834
      0 CT=TW 436844
      0 CT=EP 1153409
      0 CT=JP 2002536802
S1      10 CT=(US 6204597 OR WO 200046834 OR TW 436844 OR EP 1153409
      OR JP 2002536802)

```

File 347:JAPIO Dec 1976-2005/Dec(Updated 060404)

(c) 2006 JPO & JAPIO

File 350:Derwent WPIX 1963-2006/UD,UM &UP=200625

(c) 2006 Thomson Derwent

```

      9 PN=US 2004161929 + PN=US 2005059313 + PN=US 6445125 +
      PN=US 6580211 + PN=US 6624589 + PN=US 6848962 + PN=US
      6853126 + PN=US 6858990 + PN=US 6933664 + PN=US 6948995 +
      PN=US 6984535 + PN=WO 200167481 + PN=WO 200459713 + PN=WO
      200520266
      1 PN=WO 200520267
      17 S1:S5
S1      17 Serial: SD133
S2      5 S1 AND EMITTER? ?

```

21apr06 10:44:31 User291227 Session D35.23

File 342:Derwent Patents Citation Indx 1978-05/200621

```

      0 CT=CN 1128461
      2 CT=WO 9949492
      0 CT=AU 9928582
      0 CT=KR 99077954
      0 CT=CN 1301396
      0 CT=KR 284539
      0 CT=JP 2002517061
      2 CT=US 6727642
S1    4 CT=(CN 1128461 OR WO 9949492 OR AU 9928582 OR KR 99077954
      OR CN 1301396 OR KR 284539 OR JP 2002517061 OR US
      6727642)
```

File 347:JAPIO Dec 1976-2005/Dec(Updated 060404)

(c) 2006 JPO & JAPIO

File 350:Derwent WPIX 1963-2006/UD,UM &UP=200625

(c) 2006 Thomson Derwent

```

      3 PN=US 6972512 + PN=WO 200108192 + PN=WO 200108193
      5 S1:S2
S1    5 Serial: SD134
```

21apr06 10:45:56 User291227 Session D35.25

File 342:Derwent Patents Citation Indx 1978-05/200621

	7	CT=EP 1028458
	1	CT=JP 2000208508
	0	CT=KR 2000052627
	0	CT=TW 440970
	10	CT=US 6544875
S1	18	CT=(EP 1028458 OR JP 2000208508 OR KR 2000052627 OR TW 440970 OR US 6544875)

File 347:JAPIO Dec 1976-2005/Dec(Updated 060404)

(c) 2006 JPO & JAPIO

File 350:Derwent WPIX 1963-2006/UD,UM &UP=200625

(c) 2006 Thomson Derwent

	6	PN=WO 200259956 + PN=WO 200282554 + PN=WO 200301605 +
		PN=WO 200303471 + PN=WO 200490966 + PN=WO 200593126
	26	S1:S6
S1	26	Serial: SD135
S2	1	S1 AND EMITTER? ?

21apr06 10:47:44 User291227 Session D35.27

File 342:Derwent Patents Citation Indx 1978-05/200621

```

      2 CT=WO 9417546
      7 CT=EP 681311
      2 CT=JP 8510588
      0 CT=RU 2089004
      1 CT=RU 2097869
      9 CT=US 5965971
      5 CT=US 6023126
      7 CT=EP 681311
      0 CT=DE 69331709
      0 CT=KR 307384
S1    19 CT=(WO 9417546 OR EP 681311 OR JP 8510588 OR RU 2089004
      OR RU 2097869 OR US 5965971 OR US 6023126 OR EP 681311 OR
      DE 69331709 OR KR 307384)

```

File 347:JAPIO Dec 1976-2005/Dec(Updated 060404)

(c) 2006 JPO & JAPIO

File 350:Derwent WPIX 1963-2006/UD,UM &UP=200625

(c) 2006 Thomson Derwent

```

      10 PN=US 6762541 + PN=US 6794814 + PN=WO 200286931 + PN=WO
      200286934 + PN=WO 9417546 + PN=WO 9613848 + PN=WO 9636061
      + PN=WO 9638854 + PN=WO 9825287 + PN=WO 9949492
      28 S1:S6
S1    28 Serial: SD136
S2    14 S1 AND EMITTER? ?

```

21apr06 10:49:35 User291227 Session D35.29

File 342:Derwent Patents Citation Indx 1978-05/200621

```

      1 CT=US 6607930
      0 CT=WO 200131671
      0 CT=AU 200113475
      0 CT=US 20020146853
S1    1 CT=(US 6607930 OR WO 200131671 OR AU 200113475 OR US
      20020146853)
```

File 347:JAPIO Dec 1976-2005/Dec(Updated 060404)
(c) 2006 JPO & JAPIO

File 350:Derwent WPIX 1963-2006/UD,UM &UP=200625
(c) 2006 Thomson Derwent

```

      1 PN=US 2002173083 + PN=US 6706566
S1    1 Serial: SD137
```

21apr06 10:52:09 User291227 Session D35.31

File 342:Derwent Patents Citation Indx 1978-05/200621

	5	CT=EP 545621
	0	CT=DE 69204629
	5	CT=EP 545621
	0	CT=JP 05242794
	18	CT=US 5430347
S1	23	CT=(EP 545621 OR DE 69204629 OR EP 545621 OR JP 05242794 OR US 5430347)

File 347:JAPIO Dec 1976-2005/Dec(Updated 060404)

(c) 2006 JPO & JAPIO

File 350:Derwent WPIX 1963-2006/UD,UM &UP=200625

(c) 2006 Thomson Derwent

10	PN=US 6255768 + PN=US 6297587 + PN=US 6373176 + PN=US 6429596 + PN=US 6471838 + PN=US 6515407 + PN=US 6522053 + PN=US 6683414 + PN=WO 200046834 + PN=WO 200106531 + PN=WO 200150491 + PN=WO 9428571 + PN=WO 9624152
----	--

S1	40	S1:S8
S2	16	S1 AND EMITTER? ?

21apr06 14:10:29 User291227 Session D36.1

SYSTEM:OS - DIALOG OneSearch

File 348:EUROPEAN PATENTS 1978-2006/ 200616

(c) 2006 European Patent Office

***File 348: For important information about IPCR/8 and forthcoming changes to the IC= index, see HELP NEWSIPCR.**

File 349:PCT FULLTEXT 1979-2006/UB=20060420,UT=20060413

(c) 2006 WIPO/Univentio

***File 349: For important information about IPCR/8 and forthcoming changes to the IC= index, see HELP NEWSIPCR.**

Set	Items	Description
S1	45234	EMITTER? ?
S2	3164	EMITTING () SIDE? ? OR EMITTING () SURFACE? ?
S3	71796	CATHODE? ?
S4	1694170	LAYER???? OR DISPOS????? OR COAT???? OR FINISH????
S5	968604	CHAMBER? ? OR SPACE OR CAVIT????? OR OPENING? ?
S6	1707607	INTERFAC???? OR CONNECT???? OR FORMED OR JOINT? ? OR JOIN???
S7	1290247	FASTEN???? OR ARRANG????? OR PLACED OR PLACING OR PLACEMENT? ?
S8	677743	PARALLEL OR EQUIDISTAN???? OR EQUALLY () DISTAN???? OR DISTANCE (2N) APART
S9	1184581	SIDEWALL? ? OR WALL? ? OR SIDE? ?
S10	1305022	HEIGHT? ? OR WIDTH? ? OR DIMENSION? ? OR SIZE? ? OR DISTANCE? ?
S11	1343238	AREA? ? OR LENGTH? ? OR RATIO OR RATIOS OR TRAPEZOID????
S14	300777	SLANTING OR SLOP???? OR DIAGONAL??? OR INCLIN???? OR DECLIN????
S15	597342	SMALLER OR SHORTER
S16	1289208	LARGER OR DIVERG???? OR BIGGER OR GREATER OR LONGER OR TALLER OR HIGHER OR WIDER
S17	73	S3 (2N) S4 AND (S1 OR S2)
S18	18	S17 AND S5
S19	210057	HOLLOW? OR TUNNEL?
S20	18	S17 AND S19
S21	6	S20 NOT S18
S22	6	S17 (6N) S9
S26	273390	(S5 OR S19)
S28	393499	S10 OR S11
S29	335190	FIRST OR SECOND OR 1ST OR 2ND
S30	167945	PAIR? ? OR ANOTHER
S31	464477	S29 OR S30
S32	783172	S6 OR S7
S33	42819	S26 (4N) S32
S34	464477	S29 OR S30
S36	4403	S33 (5N) S34
S37	11	S36 AND S1
S38	62774	S14 OR S15
S39	174082	S38 OR S16

SYSTEM:OS - DIALOG OneSearch

File 348:EUROPEAN PATENTS 1978-2006/ 200616

(c) 2006 European Patent Office

*File 348: For important information about IPCR/8 and forthcoming changes to the IC= index, see HELP NEWSIPCR.

File 349:PCT FULLTEXT 1979-2006/UB=20060420,UT=20060413

(c) 2006 WIPO/Univentio

*File 349: For important information about IPCR/8 and forthcoming changes to the IC= index, see HELP NEWSIPCR.

Set	Items	Description
S1	17280	(EMITTER? ?)/TI,AB,CM
S2	25288	(CATHODE? ?)/TI,AB,CM
S3	1265313	(LAYER???? OR DISPOS????? OR COAT???? OR FINISH????)/TI,AB,CM
S4	483623	(CHAMBER? ? OR SPACE OR CAVIT????? OR OPENING? ?)/TI,AB,CM
S5	1113443	(INTERFAC???? OR CONNECT???? OR FORMED OR JOINT? ? OR JOIN????)/TI,AB,CM
S6	635548	(FASTEN???? OR ARRANG????? OR PLACED OR PLACING OR PLACEMENT? ?)/TI,AB,CM
S7	1328019	S5 OR S6
S8	583562	(SIDEWALL? ? OR WALL? ? OR SIDE? ?)/TI,AB,CM
S9	88064	(HOLLOW? OR TUNNEL?)/TI,AB,CM
S10	527291	S9 OR S4
S11	542024	(HEIGHT? ? OR WIDTH? ? OR DIMENSION? ? OR SIZE? ? OR DISTANCE? ?) /TI,AB,CM
S12	586636	(AREA? ? OR LENGTH? ? OR RATIO OR RATIOS OR TRAPEZOID????)/TI,AB,CM
S13	907203	S11 OR S12
S14	116517	(SMALLER OR SHORTER)/TI,AB,CM
S15	412215	(LARGER OR DIVERG???? OR BIGGER OR GREATER OR LONGER OR TALLER OR HIGHER OR WIDER)/TI,AB,CM
S16	101690	(SLANTING OR SLOP???? OR DIAGONAL??? OR INCLIN???? OR DECLIN????) /TI,AB,CM
S17	1082748	(FIRST OR SECOND OR 1ST OR 2ND OR PAIR OR ANOTHER)/TI,AB,CM
S19	527291	S4 OR S9
S20	98	S2 (3N) S8 AND S1
S21	25	S20 AND S19
S22	1624	S1 AND S2
S23	347	S22 AND S19
S24	465811	S14 OR S15
S25	534745	S24 OR S16
S26	906924	S25 OR S12
S27	113669	S17 (3N) S26
S28	52	S27 AND S23
S29	34	S28 AND PY<=2001
S30	278003	S17 (3N) S7
S31	19827	S30 (5N) S19
S32	134	S31 AND S1
S33	10	S31 (8N) S1
S34	1124101	S25 OR S13
S35	149330	S34 (3N) S17
S36	67	S35 AND S23
S37	46	S36 AND PY<=2001